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Yellow April 14th, 2004, 10:18 PM

The volatile mixture of potassium chlorate (KCLO-3) and red phosphor (P) is probably the simplest high-explosive to make (see also: "The Sandwich-Mine") - althrough its detonation velocity is not very high.

But it can be used in many ways. One is to make explosive napalm. The two chemicals (80 % KCLO-3 and 20% P) are simply mixed into napalm in a mixture of 80 % napalm and 20% explosive. In this mixture the KNO-3/P mixture is so diluted that it will not detonate imediately. But as the napalm burns, the explosive will get more and more concentrated, and at last detonate.

In the mixture mentioned abowe, it will typicaly detonate in 2 - 3 minutes.

The use of this exploding napalm in molotow cocktails is obvious.
Riot police are equiped with fireextinguiser, but they will normally not use them against a firebomb that lands in the middle of the street and does not threaten to set buildings at fire. They will typicaly just walk around the fire. With the right timing the napalm will detonate, just as they are passing by.

I have testet this explosive napalm many times. It only failed once, where there was short huge orange flame instead of a detonation.

In theory any primary explosive should behawe in the same way.

For experimentaition I would advise to start with very small amounts - and ignite the napalm/explosive mixture from a safe distance.

Picric acid (normaly a cap sensitive HE) should be espcially interesting, as it will detonate if exposed to 250 degrees Celsius for 5 seconds - and its detonation rate is much higher than the KCLO-3/P mixture.
The use of incendiaries to detonate picric acid has been used in many types of bombs.

nuclearattack April 15th, 2004, 04:14 AM

I think you can explode napalm in two other ways:

1. Make a main charge with an HE of your choice and add to it some alluminium or magnesium powder in a 50/50 ratio. The main charge should be placed in a tank filled with napalm. You will need a detonator to ignite the main charge. This is the same system used to ignite FAE.

2. Put in the molotov a small cap filled with NG. As the molotov crashes in the ground the fire will ignite the NG cap.

I had never tried to explode napalm so i don't know if it can work. You have to make some tests but it can become interesting.

nbk2000 April 15th, 2004, 11:36 AM

yawn

Old news, yellow-boy, as I put this very subject in my PDF back in '99.

Setharier July 3rd, 2008, 01:38 PM

Is there actually any everyday or at least from-hardwarestore-stuff that one could use for synthetizing phosphorus? It's obvious that it isn't sold around like gasoline, but still many applications include it: signs, reflectors, fertilizers, matches, cleaning agents, etc. But how can one gain a nice pile of phosphorus in his flask and turn it into white form that burns or explodes?

What I originally thought was making gasoline+polystyrene napalm(I've got around 4 gallons of pure mixture and 1-2 liters of shitty one now - choose your styrofoam carefully, the ones from the beach are in need of very deep cleansing) unextinguishable, or at least to make it burn ~10 times more confidently. In this case, could one add some oxidizing agent into it? AN? KNO3? Al? Anything that is available in big bags and sold everywhere??

fluoroantimonic July 4th, 2008, 12:23 AM

Yes it can be done, and it has been discussed many many times. The amount of effort required is probably far more than you are wiling to commit.

Al isn't quite an oxidizer, and I doubt it would react much at all under those conditions... unless maybe it was the super fine atomized variety, which is definitely not OTC.

I would imagine fine powdered nitrate salts would be useful, not for detonating, but for enhancing the combustion. There are many other oxidizers out there that should work too.

There may be some high temperature stable explosives that are soluble in petroleum that could be used to attempt to get a detonation. Any explosive not stable at fairly high temps would probably simply decompose before it becomes concentrated enough to detonate.

megalomania July 10th, 2008, 08:30 PM

One of the most appropriate methods for DIY phosphorus would be by microwave, which I have talked about before. There are many threads about DIY phosphorus production on The Forum, you have but to search for them.

Yafmot November 5th, 2008, 06:05 PM

It seems to me that if you wanted to lower the temperature at which a compound with KClO3/O4 would detonate, a small percentage of Ammonium or potassium Dichromate would probably do the trick. It may even allow the use of NH4ClO4, since it quickens up rocket propellants pretty well. At the very least, it could help accelerate the Oxidative effect. Seems worth a try.

Setharier November 6th, 2008, 08:28 AM

We some time ago attempted mixing aluminium putty from decades-old shelf-standed al-paint. The oil thinner and al powder were separated into sticky al putty and clear liquid in the can. The mixture ratio was anyway quite low, only some 5% max. was of Al putty. Anyway even this amount had significant effect on burning. Earlier we used only common polystyrene-gasoline mixture which burnt stable. The Al-mixture burnt at much higher temperature and the object, some kind of plastic shower system from construction junk pile we destroyed on both times burnt down notable faster and there were even clearly glowing dots where some al had bunched. If possible, it is bonus if one can add al powder to the mixture. Probably 10-20% mixture would be the best.

If I have understood correctly the ETN is primary-secondary initiater and is actually possible to detonate even by throwing it into fire. This way one could make a mixture of, example, 70:15:15 of napalm:KNO3:ETN. The napalm burns at increased intensity by KNO3 nitration and may even splash around and eventually the ETN should crack or in best case blow around the whole mixture.

Napalm explosive device in it's actual meaning might be possible to do by inserting 250-500g charge of PETN/ETN charge in the very middle of an 2l bottle and filling it with a mixture of 85:15 napalm:KNO3.

With increased burning capabilities, the Greek Fire is worth of inspecting. I have no much time so I copy-paste the lore from wikipedia:

* petroleum, niter, sulfur;[2]
* naphtha, quicklime, sulfur;[1]
* phosphorus and saltpeter.[8]

The preparation instructions for Greek Fire were top secret, and even nowadays there is no actual knowledge of it's ingredients. Anyway the composition can be concluded on the properties of the Greek Fire and substances available on that time.

Because the substance lit in contact with water, it had potassium oxide.
The stickiness was achieved with colophon resin, pitch and naphta.
Smoke and poisonous fumes were caused by sulphur and pitch.
The actual burning agent was probably petroleum.
Because the composition burned even submerged there was an oxidizer, probably potassium nitrate. This also made the composition splash around.

For modern Greek Fire, we need:

-Pyrophoric and/or hydrophoric substance
-Substance that is really sticky and likely burns
-Substance that releases very poisonous fumes when burnt
-Substance that is only for burning
-Powerful but controllable oxidizer

So something like napalm, potassium cyanide, white phosphorus and KNO3 and/or AN would do it. If not vacuum sealed before use, it will cause obvious ignition danger in any environment.

Yafmot November 7th, 2008, 01:20 AM

Uh, suppose we just skip the KCN, especially on a day when the wind is shifting a lot. There are many better ways to disperse toxic agents, and if you have to occupy the area you've attacked, you'd just about have to use NBC gear, since you wouldn't know for sure how much of that stuff would get deposited on nearby surfaces.

Maybe a toxin with a predictable half-life, so you'd have some idea about the risks. Also, poisoning people is considered a not nice thing to do in modern times. Perhaps a delivery system that was a little more selective, a little less ham-fisted.

Freshly formed Zinc Oxide can cause Metal Fume Fever, which is very debilitating and can even kill. However, after it's had a chance to disperse and cool off a little, it's much less pernicious. Something like this would allow you to incapacitate large numbers of bad guys without the adverse area denial associated with a persistant agent. Maybe load the incendiary compound with Zinc Peroxide and straight Zinc. When they combined, they would form ZnO, and it would be hot & dense. While they're gagging, choking and bringing up chunks of lung & trachea, and shivering like hell from their clogged kidneys, you could just sit & wait for the ZnO to cool and disperse before going in to either capture them of finish them off. They wouldn't be in good enough shape to put up much of a fight.

So, whaddaya' think?

Setharier November 7th, 2008, 01:46 PM

Most likely Zinc Oxide is better in every way. The very little I know about toxins is just about the clich� nerve gases from every B-movie, KCN and HF maybe. The whole idea using "poison-napalm" came from Greek Fire and definitely is a minor thing when speaking about explosive incendiary device :).

Telkor January 3rd, 2009, 10:48 AM

Take a small charge (flashpowder should be enough) combined with red phosphor. It will disperse and raise the temperature to 1300� C immediately, dispersing any volatile fuel.

The army used a special launcher with 240 g of red phosphorus, which could cover a square of 15 x 50 meters with the burning powder (and smoke) to make optical and infrared systems useless. Combined with any other fuel, it should be quite impressive.

So something like napalm, potassium cyanide, white phosphorus and KNO3 and/or AN would do it. If not vacuum sealed before use, it will cause obvious ignition danger in any environment.

If you're looking for a toxic napalm, use any organochlorine compoud instead of gasoline (most chloroethanes are flammable). Fire and phosgene/dioxine are definitely a nasty mix.

-=HeX=- January 3rd, 2009, 12:18 PM

I have little experience with napalm, I never really saw the point for my uses. However I had an idea recently: Gel capsules. You get those gel caps for medicine and place the primary explosive of your choice in them, or preferably a flash mix, as primary explosives tend to put out fire in their vincinity. Maybe chlorate and magnesium flash in the capsules. Also, most flash mixes are NOT GOOD when RP is added, it can react very badly.

I think a fuel like napha would work well as the fuel, maybe with some Teflon/Mg granules added to help raise the temp. A CuO/Al thermite would be good as the lift/ dispersal charge. Well, thats all my input on the topic.

Telkor January 3rd, 2009, 02:30 PM

A CuO/Al thermite would be good as the lift/ dispersal charge. Well, thats all my input on the topic.

Btw, CuO thermites work best with some Maltodextrin.

60% thermite, 20% Dextrin, 20% KNO3 makes it fuse sensitive, but less sensitive to friction.

Cobalt.45 January 3rd, 2009, 03:23 PM

60% thermite, 20% Dextrin, 20% KNO3 makes it fuse sensitive, but less sensitive to friction.Do you know this as a fact, or is this something gleaned from the 'net? Because had you actually TRIED this, you would've seen that it turns perfectly good thermite into a pile of shit that will not take fire from a god damn butane torch, let alone visco.

20% dextrin added to most compounds would likely render them all but un-igniteable. It's used as a water activated binder in pyrotechnics at about 5% w/w.

Get your facts from first hand experimentation when possible. Otherwise, site your sources so they can be evaluated for accuracy and authenticity.

Telkor January 3rd, 2009, 03:29 PM

Do you know this as a fact, or is this something gleaned from the 'net?

20% dextrin added to most compounds would likely render them all but un-igniteable. It's used as a water activated binder in pyrotechnics at about 5% w/w.

Are you sure you don't mean dextrose or sucrose?

I'm sure, 'cause I tried it.

Yet I am not sure about the ratios, as my lab scale wasn't working, but it should be anywhere in this magnitude....

And yes, it was a sweetener containing 97 percent Maltodextrin.

It burned well, and it wasn't even very fine grinded aluminum. It did ignite when heated with a small propane torch, so it should work with sparklers or even visco fuse, too.

Here's a video of thermite + dextrin. (I didn't make it, but I guess it's iron oxide thermite).

http://de.youtube.com/watch?v=nicfJRlAoSw

Cobalt.45 January 3rd, 2009, 03:49 PM

Sorry, but this pisses me off.

You and your "formula" are full of it, as far as I'm concerned.

If the comp you site DID actually burn, it was because of the 3% that WASN'T dextrin. And to say that it was fuse-igniteable, when you used a torch! on it to ignite it is just short of a lie, isn't it?

I (just for laughs, as I already highly suspected this comp to be completely useless) made up a test of this comp and no, it doesn't burn- period- even with a propane torch on it!

And for christ's sake, if you don't have a scale, why do you give ratios and percentages that are pulled out of the air? A statement like "it should be anywhere in this magnitude...." should be stated from the get-go, along with the fact that you actually have no real idea WHAT the fucking ratios were.

Edit:
After adding additional fuel to the stoich ratio of 4.4:1 CuO (200 mesh black copper oxide):Al (1000mesh atomized), I was able to ignite this thermite with the additional KNO3 and dextrin.

It took a butane torch, and the flame had to be held on the pile until it glowed orange. After ignition temp was reached, it flashed.

So, it can be made to burn burn. But FAR from being fuse-ignitable. I was able to get a smoulder from a small pile, using multiple strands of black match. It consumed the pile rather slowly, with the glow of a lit cigarette. I thought it might actually light, but it didn't.

As to whether or not this CuO/Al thermite with added dextrin and KNO3 is less friction sensitive- I have no idea, nor do I care. At this point my experimentation along these lines is finished.

Telkor January 4th, 2009, 07:21 AM

@ Cobalt: Would you just calm down again?

You're obviously right, I retried this formula with exact scaling and it doesn't work. The first attempt apparently didn't contain that much dextrin (I mixed it with volume and density calculation, which seems to be inappropriate).

Sure, it makes a difference if you use a torch or fuse, but it might work with better ratios (which I haven't found yet), as you can see in the youtube link.

festergrump January 4th, 2009, 10:55 AM

The RS Forum is supposed to be about tried and true shit or serious and methodical explanation of formula and/or design, not speculation and untried youtube links of who really knows what, else we would not be any further along than any crapsite out there... so I think Cobalt's being upset is valid. Who enjoys reading through 13 pages of crap posts to find something useful that may or may not work, anyway?

IMHO, if you are going to post, post a question about something you have truly researched and preferably tried or hold off until you do. No sense in bringing in other peoples time and chemicals or materials and such into play until you make a go or two at it yourself or all this Forum is now becomes just another link dump with various ideas of possibilities. Not The Forum's intention, I assure you.

My advice to anyone is to refrain from posting unless it is to possibly help a member or to post fact, solid theory, or personal experience (by solid theory I mean backed by figures and reason, not simply chem mix without ratio). Anything less is to fall short of the scope of this Forum's objectives.

Ultimately, telling Cobalt to chill out is a bit out of line on your part. Had you only done what you have now before your other post and maybe a bit more experimentation on your part, you would likely not have been warned at all...

All of this entire post of mine is only to help you (and hopefully others) become a better member here, nothing more, nothing less.

Telkor January 4th, 2009, 02:11 PM

IMHO, if you are going to post, post a question about something you have truly researched and preferably tried or hold off until you do. No sense in bringing in other peoples time and chemicals or materials and such into play until you make a go or two at it yourself or all this Forum is now becomes just another link dump with various ideas of possibilities. Not The Forum's intention, I assure you.

Okay, if speculations/ uncertain instructions etc. aren't desired, please delete the concerned part.

Alexires January 4th, 2009, 06:25 PM

Actually, we refrain from "deleting" things unless they are really a pile of shit. Even failures can be learned from and if something can be learned from, then it should stay on The Forum.

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